

What is claimed is:

1. A spectrophotometer comprising:

a light source including a detection lamp for irradiating light in a wavelength region used for detection and a wavelength check lamp having a bright line in the wavelength region used for detection,

an optical system for irradiating light from the light source to a detection position,

a light detecting section for detecting the light from the detection position,

a spectral element provided on one of an optical path between the light source and the detection position and an optical path between the detection position and the light detecting section,

a spectral element driving mechanism connected to the spectral element for changing an angle of the spectral element, and

a reference position detecting section for detecting a reference position of the spectral element where one of a zero-order light and a bright line is ejected on the detection position based on electric signals from the light detecting section and the dispersing element driving mechanism.

2. A spectrophotometer according to claim 1, wherein the detection lamp is formed of a D<sub>2</sub> lamp and the wavelength check lamp is formed of a low-pressure mercury lamp.

3. A spectrophotometer according to claim 1, wherein at least one of the detection lamp and the wavelength check lamp is a see-through type, the detection lamp and the wavelength check lamp

being disposed on a same optical path.

4. A spectrophotometer according to claim 1, wherein the reference position detecting section controls operations of turning on and off the detection lamp, operations of turning on and off the wavelength check lamp, operations of the spectral element driving mechanism, and operations of the light detecting section such that after only the wavelength check lamp is turned on to detect a reference position of a bright line of the wavelength check lamp, the detection lamp is turned on to detect at least one of a reference position of the zero-order light of the detection lamp and a reference position of the bright line of the detection lamp.